



UFAORGSINTEZ PJSC

450037, Russian Federation, Republic of Bashkortostan, Ufa

Quality Division, Testing Center for Petrochemical Products, Raw Materials and Environmental Facilities

Unique number of entry in the Register of Accredited Entities No. RA.RU.21YФ03

Laboratory for the Quality Control of the Products Obtained During the Production of Polyethylene



**CERTIFICATE No. 10348-2021**  
**POLYETHYLENE**  
**GOST 16337-77 with amendments 1-3**

**Brand** 15803-020, grade 2 **OKPD2 Code** 20.16.10.111  
**Batch No.** 10348 **Net weight** 1450.00 kg  
**Date of manufacture** December 20, 2021  
**Date of sampling** December 20, 2021  
**Test date** December 21, 2021  
**Designation of the regulatory documentation (RD), according to which the sample was taken** GOST 16337-77 with amendments 1-3, Item 2.2, 2.3, 2.10

Item No.	Name of indicator	RD for test method	Norm according to GOST 16337-77			Analysis result
			Highest grade	Grade 1	Grade 2	
1	Density, g/cm <sup>3</sup>	GOST 15139-69 with amendment 1, Item 5, GOST 16337-77, Item 3.11	from 0.9170 to 0.9210 (0.9190 ± 0.002)			guarantee
2	Melt liquidity index, g/10 min	GOST 11645-73 GOST 16337-77, Item 3.12	from 1.5 to 2.5 (2.0 ± 25%)			1.5
3	Diversity of the melt liquidity index within batch, %	GOST 16337-77, Item 3.13	±6	±12	±15	4
4	Number of inclusions, pcs.	GOST 16337-77, Item 3.14	no more than 2	no more than 8	no more than 30	2
5	Process sample for the film external appearance	GOST 16337-77, Item 3.15	A, B	B	C	Without the guarantee of film
6	Tensile yield point, Pa (kgf/cm <sup>2</sup> )	GOST 11262-2017 GOST 16337-77, Item 3.17	not less than 93*10 <sup>5</sup> (95)			guarantee
7	Tensile strength, Pa (kgf/cm <sup>2</sup> )		not less than 113*10 <sup>5</sup> (115)			guarantee
8	Tension set, %		not less than 600			guarantee
9	Odor and taste of aqueous extracts, points	GOST 22648-77 GOST 16337-77, Item 3.24	no more than 1		not standardized	-
10	Mass fraction of extractables, %	GOST 26393-84 GOST 16337-77, Item 3.18	no more than 0,4	no more than 0,6		guarantee
11	Mass fraction of gray granules, %	GOST 16337-77, Item 3.9	-	no more than 0.1		0.00
12	Mass fraction of oxidized granules, %	GOST 16337-77, Item 3.9	-	no more than 0.1		0.00
13	Mass fraction of the granules with other coloration, %	GOST 16337-77, Item 1.6	-	no more than 0.04		0.00
14	Mass fraction of the granules with a size from 5 to 8 mm, %	GOST 16337-77, Item 3.8	no more than 0.25			0.00
15	Mass fraction of the granules with a size from 1 to 2 mm, %		maximum 0.5			0.0

**Conclusion: the product complies with GOST 16337-77 with amendments 1-3**

The products are manufactured under the management of management systems certified for compliance with the requirements: ISO 9001:2015 Certificate No. 31100600 QM15, ISO 50001:2018 Certificate No. 31100600 EMSt18, ISO 14001:2015 Certificate No. 31100600 UM15, ISO 45001:2018 Certificate No. 31100600 OHS18.

**Scope of application:** Intended for the production of technical devices, devices contacting with food, toys, films and film devices, for the use in medicine (including the production of devices permitted for the packing of drugs) and agriculture.

**Characteristics of fire and explosion hazard:** Combustible, when heating during the processing above 140 °C and exposure of open flame, volatile products of thermal and oxidative destruction, which contain organic acids, formaldehyde, acetaldehyde, and carbon monoxide, are released. In case of the exposure of open flame, polyethylene inflames without explosion and burns with sooting flame. Aerosol and dry dust of polyethylene are highly explosive; the particle friction results in accumulating the charge of static electricity.

**Transportation rules:** Transported by all types of transport in sheltered vehicles in accordance with the rules of cargo transportation, which are in force in this type of transport. When transporting by sea, paper bags shall be inserted into polyethylene bags; the transportation in bulk in railcars (model 17-495(917)), tank containers (GOST 26380), special tanks, and tank trunks (type K 104OЭ). Packing shall be done as per GOST 21929, bag sizes shall comply with GOST 24597, and means of fixation shall comply with GOST 21650.

**Storage rules:** Storage conditions: temperature not more than 25 °C, air relative humidity of 40-80 %. Store in closed room while avoiding the exposure of direct sunlight at a distance of not less than 1 m from heating devices. Before opening, the bags with polyethylene must be allowed to stand in industrial room for at least 12 hours.

**Neutralization, disposal, and burial of wastes:** Wastes that are inapplicable for recycling do not require neutralizing, are subject to removal to places agreed with authorities of the Ministry of Extraordinary Situations of the Russian Federation and Federal Service for Supervision of Consumers Protection and Welfare (Division of the Federal Service for Supervision of Consumers Protection and Welfare).

**Warranty period of storage:** for the polyethylene with a melt liquidity index up to 12 g/10 min  
Basic brands: 3 year from the date of manufacture. Compositions: for stabilization formulations: No. 08: 3 years;  
Nos. 03, 06, 07, 14, 98: 5 years; Nos. 01, 02, 04, 09, 10, 12, 93-97, 99, 100: 7 years.

Chemical Analysis Laboratory Assistant of 5th  
Category (Power of Attorney No. 33/21 dated  
January 1, 2021)

Seal:  
PUBLIC JOINT STOCK COMPANY  
PUBLIC JOINT-STOCK COMPANY  
Quality Department  
Quality Division  
7/2  
"UFAORGSINTAZ"  
UFAORGSINTEZ

Signature

L.A. Lezhneva

Stamp here

Date of certificate documentation December 21, 2021

Signature